# Developing Performance Measurement Instruments



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#### Introduction

Instruments are the "hammers and saws" used to implement your performance measurement. They are the tools used to measure your program's services and collect information needed to determine your outputs and outcomes. There is not an all-purpose tool, special tools are needed for particular tasks. The more specific the instrument is to your measurement task, the higher degree of control you will have over your data.

This packet will describe the steps you need to develop your own instrument. Each step includes explanations and examples. There is a pilot test exercise for you to complete as you work through this packet on page 8. At the end of the packet, you will find examples of different types of instruments.

# **Steps to Develop an Instrument**

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- 1. Identify the Information Needed
- 2. Choose a Type of Method
- 3. Create Questions
- 4. Format Your Instrument
- 5. Test Your Instrument

## Identify the Information Needed

Before you begin developing your instruments, decide what type of information you need and how much information you need. Think about your performance measures (outputs, intermediate outcomes, or end outcomes). What type of information will you want in order to demonstrate your progress towards your intended results? The following questions will help guide your decision-making process.

| As you consider the information you need, ask yourself the following questions: | Suggested Method:  |  |
|---|--|--|
| Do you need information from existing records?                                  | Consider using a datasheet.  |  |
| Do you need to know whether something (an idea or behavior) exists?             | Consider a checklist or YES-NO format.   |  |
| Do you need to assess attitudes or opinions?                                    | Consider a rating scale of numbers or phrases.   |  |
| Do you need to assess knowledge or skills?                                      | Consider using a test or observation.  |  |
| Do you need to get a rating such as quality or satisfaction?                    | Consider using a scale of numbers or phrases.  |  |
| Do you need details about something?  | Consider asking an open-ended question.  |  |
| Do you need to be able to ask follow-up questions?                              | Consider using an in-person format such as an interview, phone survey, or focus group. |  |

#### Choose a Type of Method

When you are trying to demonstrate change, different instruments are better suited to collecting different types of information. Select the type of instrument that gathers the most direct information about your program's impact without imposing an unreasonable burden on your staff or participants. The burden an instrument presents depends on both the type and length of service people are receiving and on the level of skills of the people taking or administering the instrument. Even a short written survey may present an undue burden for participants who cannot read, while longer observations, interviews, or phone surveys may not present a problem at all. The list below will help you determine the most direct measure of the change you want to see.

| As you consider what you want to change, ask yourself the following questions: | More Direct<br>Measures:  | Less Direct<br>Measures:   |
|--|---|--|
| Do you want to change Knowledge?   | ?? Tests ?? Skill Assessments ?? Rubrics ?? Skill Observations ?? Subject Specific Grades | ?? Self Report of Knowledge Gained (from survey, interview, journal) ?? Other's Report of Knowledge Gained   |
| Do you want to change Affect, Attitudes, or Opinions?                          | ?? Self Report of Changed Attitudes (from survey, interview, journal, focus groups)       | <ul> <li>?? Other's Report of Changed</li> <li>Attitudes</li> <li>?? Observation Records</li> <li>?? Portfolio Inventory</li> </ul>  |
| Do you want to change <b>Behavior?</b>   | ?? Observations<br>?? Records (attendance, crime,<br>teen pregnancy)                      | ?? Self Report of Changed Behavior (from survey, interview, journal, focus groups) ?? Other's Report of Changed Behavior ?? Self Report of Changed Attitudes Toward a Behavior (from survey, interview, journal) |

#### **Create Questions**

The type of questions you ask and the type of response you want from the participants will depend on your information needs, as well as the time and tools you have available to conduct the analysis.

| Before you write your questions, think about the following:   | Example:  |
|---|---|
| Choose methods that are accessible to participants.   | Don't use written surveys for people who can't read, or phone surveys where many people don't have phones.  |
| Use language that participants understand and eliminate extra words.  | In your view is service learning an effective way to teach?  Versus In your view is service learning an effective pedagogical  strategy?  |
| Ask questions that respondents can answer credibly.   | How many discipline referral letters have you received during this school year?  Versus  How many times was your child disciplined in class during this school year?                              |
| Avoid "double-barreled" questions.  | Has this child's classroom behavior improved? Versus Have this child's homework habits and classroom behavior improved?   |
| Avoid biased and value laden words or phases.   | Please rate the quality of this program Versus How good was this program?   |
| Ask sensitive questions only when necessary and choose your wording carefully (i.e., not too personal, too vague, or too direct). Questions regarding lack of academic success, discipline, substance abuse, physical or sexual abuse, income, or age may be sensitive. | Circle your annual income: Less than \$20 K, \$20-\$40 K, \$41-\$60 K, \$61-\$80 K, \$81-\$IOO K, more than \$IOOK Versus Are you Rich, Middle Class, or Poor? Versus What is your annual income? |

#### The two basic types of questions are selection and supply.

**Selection questions** provide a limited range of responses from which respondents can choose. This type of question limits the choices of the respondent, allowing you to have some control over the answers you get. It speeds up the information collection process and, when carefully planned, allows you to get the information you need. It also makes planning for, and conducting analysis, relatively straightforward. However, these types of questions do not allow respondents to provide much in the way of descriptive or explanatory information. Types of selection questions include yes-no, ratings, checklist, categories, multiple-choice, and true-false.

**Supply questions** ask a question, but do not provide answer categories. Types of supply questions include short answer, close-ended, and open-ended. Sometimes people construct questions that have space for an answer, as if the questions were open-ended, but word them as if they were yes/no or rating questions. Review the open-ended questions you use carefully. If you can answer them with a "yes/no" or any other short phrase, consider making them "selection" questions or reword them. To get truly open-ended questions, try adding words like "what about," "how," or "please describe." (For example, instead of asking, "Did you like our services?" try asking, "What about our services did you like?" Instead of asking, "What was the quality of the training you received?" try, "Please describe the atmosphere of the training.")

#### Selection questions might look like the following:

| Is this your first visit to the Richmond Community Center? ? Yes ? No  |
|--|
| How would you rate the overall quality of the activity? ? Great ? Good ? So-so ? Awful   |
| Please rate the training on a scale of 1-10, where 10 is excellent, and 1 is poor.   |
| Which of the following activities did you participate in today? (Please check all that apply.)  ? basketball ? watching movies ? arts and crafts ? other |
| How many hours do you spend watching television each week?  ? none ? less than 5 hours ? 5-10 hours ? more than 10 hours                                 |
| What is the correct amount to tip when you have a good food server? ? nothing ? 5% ? 10% ? 15% ? 20%   |
| One way to determine the meaning of a word is to read around the word.  (please circle one) True False   |
| Supply questions might look like the following:  |
| How old are you? years How can we improve our service?   |
| Name two items we can recycle at our program:  |

#### Format Your Instrument

There are five main parts of an instrument you want to include: the title, the introduction, the directions, the questions, and the demographics.

**Title:** Use a clear, concise title that reflects the content of the instrument.

**Introductory Statement:** Include information about the instrument's purpose, respondent confidentiality, and use of the data.

**Directions:** Explain how to fill out the instrument as well as when, where and how to return it. Let respondents know the level of confidentiality you will provide (e.g., who will see their responses, how responses will be reported). Always provide the confidentiality you promise.

**Questions:** Use any type and combination of questions you wish (e.g., scale, category, checklist, yes-no, open-ended), but only ask questions for which you need information.

**Demographics:** Include questions that ask respondents for information about themselves and their background. Only ask questions for which you **need** answers. Putting these questions last on your form will increase the probability of completion.



#### While you format your instrument, think about the following:

Use a font big enough for your participants to read.

Keep the questions and the answer options together on the same page.

Don't crowd questions together.

Allow enough space for participants to write when using open-ended questions.

Use graphics or icons, if possible, to increase your document's attractiveness.

Always allow for comments, concerns, or suggestions.

#### Test Your Instrument

**Table of Specifications:** One way to ensure that your instrument will collect the information you intended is to create a worksheet that matches up the information you need with the instrument items that collect that information. This worksheet is called a Table of Specifications. You can use this worksheet for one instrument at a time, or for a group of instruments that address the same issues.

#### A complete Table of Specifications would look like the following:

| Table of Specifications for: Teacher Evaluation Form (see page 10) |  |  |  |  |
|--|--|--|--|--|
| What is the information you need?                                  | Which questions collect this information?              |  |  |  |
| Which students do we serve?  | name of student, grade, name of school, and question 3 |  |  |  |
| Do the work habits of the student change?                          | question 1, question 9                                 |  |  |  |
| Do the social habits of the student change?                        | question 4, question 7                                 |  |  |  |
| Do the attitudes of the student change?                            | question 5, question 6                                 |  |  |  |
| Does the program address the needs of the student?                 | question 2, question 8                                 |  |  |  |

#### It's Your Turn

You will find a blank Table of Specifications on page 11 for your use. Create a Table of Specifications for one of your program's instruments.

**Pilot Testing Guidelines:** It is important to pilot test your instrument. The following are guidelines for you to conduct your own pilot test of an instrument.

- 1. Find participants (4-5 people) from the group of people whom you will actually be surveying or interviewing.
- 2. Arrange for these participants to test the pilot instrument in the conditions as close to the actual administration conditions as possible. Consider the time of day, the location, and even the method. If it is a phone interview, practice over the phone. If it is a mail survey, make sure they complete the form without any assistance, or even mail it to them. It is a good idea to record the time it takes your participant to complete the survey, especially if written.

3. After each participant completes the instrument, arrange a time to discuss the experience. This will usually last two or three times longer than it took to complete the instrument. The following are some questions you might want to ask.

| Overall Questions  | Individual Questions   | Logistical Questions                         |
|--|--|--|
| What do you think this survey is about?                    | Do you think participants will understand how to answer?                       | Are the directions clear?                    |
| What problems, if any, did you have completing the survey? | Is there any language in the survey that people you know might not understand? | Was it clear how to return the survey?       |
| How do you think the information will be used?             | Do you think participants will find any of these questions too sensitive?      | How long did it take to complete the survey? |

- 4. Collect the completed instruments. Read through the responses. Did participants interpret the questions the way you intended? Try to analyze and present the results of the pilot test the way you will for your actual survey or interview.
- 5. Share the results of your pilot test with other people who will be using the data. Does this instrument provide the data to answer their questions? Modify your instrument based on the information you have gathered.

#### It's Your Turn

After you read the scenario below, imagine you are a teacher and try to complete the "Teacher Evaluation Form" on page 10. After you have completed the form, decide if it provides the information you might be looking for in this situation. Additionally, consider the questions found in the pilot testing guidelines on page 8. Finally, determine what changes you might make for a more effective survey.

#### Scenario

You are a 5<sup>th</sup> grade teacher at Jackson Elementary School. Pat Michaels, one of your more difficult students, is in danger of failing in reading. She pays little attention to homework or class work. In addition, she frequently disrupts the class by talking, asking irrelevant questions for your attention, and fighting with other students. You asked Lisa, a tutor who works at your school, for some assistance.



Lisa spends an hour a week talking with Pat about her life, discussing appropriate classroom behaviors, and tutoring her in reading. Additionally, Lisa includes Pat in a daily thirty minute reading lab group and sees her in the after-school homework club which meets three days a week, for two hours each day.

After ten weeks, Pat's reading scores are up two letter grades, partly as a result of increased homework points, and partly because of improved class work and test scores. Although Pat still talks in class, she is no longer acting out against other students. She continues to ask many questions; however, they are often more relevant to her schoolwork.

#### TEACHER EVALUATION FORM

| Nar  | ne of Student: Grade:  |
|------|--|
| Nar  | me of Teacher: Name of School:   |
| 1.   | Why did you refer this child to the tutor?   |
| 2.   | Has the reason for your request been addressed? (_) Yes (_) No (_) I don't know  |
| 3.   | During this school year <i>approximately</i> how many hours of assistance (total) did this student receive?  (_) Less than 200 hours  (_) Between 200 and 400 hours  (_) More than 400 hours |
| 4.   | The student's attitude towards school is:  (_) Better than (_) Worse than or (_) The same aswhen he or she started the program.  |
| 5.   | The student's homework habits are:  (_) Better than (_) Worse than or (_) The same aswhen he or she started the program.   |
| 6.   | The student's class work is:  (_) Better than (_) Worse than or (_) The same aswhen he or she started the program.   |
| 7.   | The student's classroom behavior is:  (_) Better than (_) Worse than or (_) The same aswhen he or she started the program.   |
| In 1 | what way has his or her behavior changed?  |
| 8.   | The student's social skills with peers are:  (_) Better than (_) Worse than or (_) The same aswhen he or she started the program.  |
| 9.   | The student's social skills with adults are:  (_) Better than (_) Worse than or (_) The same aswhen he or she started the program.   |
| 10.  | Please write anything more you would like to tell us?  |

| Table of Specifications for:      |   |  |  |  |
|-----------------------------------|---|--|--|--|
| What is the information you need? | Which question(s) collect this information? |  |  |  |
|                                   |   |  |  |  |
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|                                   |   |  |  |  |

# Sample Instruments



Sample Survey page 13

Sample Interview Guide page 14

Sample Focus Group Guide page 15

Sample Volunteer Sign-In Sheet page 17

Sample Rubric page 18

# Participant Exit Survey

(Modified from Summerbridge exit form)

Dear national service participant: This national service program wants to know about your thoughts on your national service experience. Please take five minutes to answer the following questions. All of your answers will be confidential, and this information will be used to assess the effectiveness of national service. Please return this survey to the program coordinator in the enclosed self-addressed stamped envelope.

|     |  | Excellent | Good | Fair | Poor | N/A |
|-----|--|-----------|------|------|------|-----|
| 1.  | Rate the effectiveness of the training process in preparing you for your responsibilities at your host site.                         |           |      |      |      |     |
| 2.  | Rate the opportunities you received to network in your community with other professionals in your field.                             |           |      |      |      |     |
| 3.  | Rate the opportunity to network with other national service participants of (your program name).                                     |           |      |      |      |     |
| 4.  | Rate the effectiveness of the emotional support you received from other programs.  |           |      |      |      |     |
| 5.  | Rate the opportunity to network with national service participants from other programs.  |           |      |      |      |     |
| 6.  | As a national service participant, I have improved my confidence in my skills as a   |           |      |      |      |     |
| 7.  | My national service experience requires me to work closely with people from different backgrounds than myself. For me this has been: |           |      |      |      |     |
| 8.  | I rate the effectiveness of the program in increasing my commitment to community.  |           |      |      |      |     |
| 9.  | I rate the effectiveness of the program in increasing my commitment to diversity.  |           |      |      |      |     |
| 10. | My national service experience has done a(n) job in increasing my understanding of citizenship.                                      |           |      |      |      |     |
| 11. | My national service experience has provided a(n) opportunity for dynamic leadership opportunities.                                   |           |      |      |      |     |
| Wh  | What else would you like us to know?   |           |      |      |      |     |

Developed by Oregon Coalition Against Domestic & Sexual Violence in conjunction with Project STAR.

# Interview Guide for an Informational Interview Persons Name Date, Appointment Time

#### Directions to site.

(Note: This is an informal guide meant to prompt the interviewer in general areas, rather than to be used verbatim.) Goal: Find out about evaluation opportunities in the Bay Area.

What projects are you involved in?

How did you get where you are?

What is your/your department's approach to evaluation? What are some of your current projects?

What skills do you find useful in your position? What skills do you like to see in evaluators?

What skills would healthcare employers/programs look for if I were interested in evaluation? What experiences?

What impression does my resume give you of my skills and background? How can I make it more appropriate for this market?

What other organizations exist that hire people with my qualifications?

- ?? Federal government?
- ?? State government?
- ?? Local government?
- ?? Private industries/labs?
- ?? Non-profit/women's organizations?
- ?? University organizations?
- ?? Schools?

Can you give me additional names of other people at the following to contact for information?

- ?? Other government organizations/Department of Education/GAO
- ?? SRI/Far West Laboratory/other private labs
- ?? State government?
- ?? Local school districts?

What other resources/places to find a job?

# **Sample Focus Group Guide**

#### **Focus Group Instructions**

| . `                                  | ocas Group man actions  |
|--------------------------------------|---|
| То                                   | troduction day we will be talking about how you make decisions and what you have learned in about aking decisions.  |
| In<br>im<br><i>ma</i><br>(tal<br>wil | this group, there are no right or wrong answers to the questions that I ask. All of your answers are portant. I want to be able to hear what everyone has to say, so please, only one person talk at a time. (It may be good to have younger students raise hands to respond, if that is what they are used to.) We are king notes/recording) so that we don't miss any of your comments. The information we get from this group all be used only to help us improve our program. (You may need to adjust/omit this part for younger udents.) |
|                                      | Everyone has to make decisions (or choices). Think about the last time you had to make a choice.  ?? What was it (e.g., chose to read a story instead of going outside)?  ?? What things did you think about when you made that choice?  ?? What are some things you get to choose?   |
|                                      | One decision that kids your age have in common is regarding your schoolwork and homework. (For example, whether or not to do your homework.)  ?? What are some things you consider when you make choices about your schoolwork and homework?  ?? What have you learned in about making decisions about your schoolwork and homework?  |
|                                      | One common decision that a lot of people need to make is whether or not to follow rules. ( <i>Give example of rule if needed.</i> ) ?? What are some things a person might consider when choosing whether or not to follow rules? ?? What if your friends told you to break a rule? What are some things you would think about before you made your decision? ?? What have you learned in that helps you decide whether or not to follow rules?   |
|                                      | Other common decisions people need to make are about what to do when they have a conflict (an argument or a fight) with another person.  ?? What are some things you should think about when you want to settle a conflict?   |

?? What have you learned in \_\_\_\_\_\_ that helps you decide how to settle a conflict?

| 5. | Sometimes people make choices about h                           | nelping other people. (For younger children, use an example of |  |  |
|----|---|--|--|--|
| he | elping a parent or teacher with a chore; for                    | older youth, use a community service example.)                 |  |  |
|    | ?? Think about the last time you chose did you consider)?       | to help someone else. Why did you choose to help (what things  |  |  |
|    | ?? What have you learned in                                     | that helps you make decisions about helping others?            |  |  |
| 6. | Everyone has things they don't know. (I house to the mall.)     | For example, how a car works or how to get the bus from your   |  |  |
|    | ?? What do you do when you want information? How do you get it? |  |  |  |
|    | ?? What have you learned in                                     | that helps you make decisions about finding information?       |  |  |
| 7. | What is a goal?   |  |  |  |
|    | ?? What are some of your goals?                                 |  |  |  |
|    | ?? What have you learned in                                     | about setting and achieving your goals?                        |  |  |
| 8. | We've talked a lot today about what dec                         | cisions you have to make and what you have learned in ns.      |  |  |
|    | ?? By a show of hands, how many of make better decisions?       | you think that has helped you learn how to                     |  |  |

## Closing

Ask if there are any questions that participants would like answered. If not, thank participants and dismiss groups. Take time to write up notes on the responses to each question <u>immediately</u> after each group (even if you use a tape recorder or a note taker).

# Sample Volunteer Sign in Sheet

(For one-time events)

| Event                      | Date_          | Date                 |  |  |
|----------------------------|----------------|----------------------|--|--|
| Volunteer Name             | Time in        | Time out             |  |  |
|                            |                |                      |  |  |
|                            |                |                      |  |  |
|                            |                |                      |  |  |
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|                            |                |                      |  |  |
|                            |                |                      |  |  |
|                            |                |                      |  |  |
| Total volunteers this nage | Total hours or | untributed this nage |  |  |

Note: This sample can be modified with columns containing other relevant information such as volunteer phone numbers or addresses to keep better track of walk in volunteers, or with a column to keep track of tasks or sites at which volunteer work is being done.

# Sample Rubric: Assessing Growth in Learner Narratives

| ou.                                | 4-Strong Writer   | 3-Competent Writer   | 2-Developing<br>Writer   | 1-Emergent Writer  |
|------------------------------------|---|--|--|--|
| Voice/images                       | powerful voice; the<br>personality of the writer<br>comes across very<br>strongly; powerful images  | some evidence of voice<br>and vitality but inconsistent  | writer does not yet come<br>across as a person with a<br>distinct story to tell  | writing appears memorized or copied  |
| Details/Examples                   | vivid details that illustrate<br>the story and provide<br>concrete evidence and<br>support  | may show one or two<br>strong details – but<br>otherwise still very general  | writing very general - few<br>examples - almost no<br>details or somewhat<br>repetitive  | no examples or details that<br>would help bring the story<br>to life   |
| Ideas/Focus                        | strong idea(s), including<br>explanations or analysis<br>of what has happened   | ideas somewhat hazy but<br>a sparkle of an original<br>idea appears  | difficult to find core idea;<br>writing may be somewhat<br>rambling without a clear<br>focus                                       | no particular ideas evident;<br>sentences appear strung<br>together  |
| Clarity                            | ideas or examples are<br>clear for the most part;<br>although writer may still<br>have trouble with<br>grammar and vocabulary   | meaning gets confused<br>here and there – but reader<br>can guess at the gist of the<br>story  | the reader has difficulty<br>following the story or<br>understanding large parts<br>of it  | extremely difficult to make out meaning  |
| Fluency                            | language flows nicely - ideas are connected and relationships are clear - vocabulary sounds natural for the most part – some grammar problems may be evident                | language flows naturally<br>at some points - but<br>moves in fits and spurts at<br>other points - word choice<br>may sound unusual here<br>and there | language reads choppy<br>with breaks in meaning or<br>sharp turns in between;<br>vocabulary may not<br>match the rest of the style | words and sentences don't<br>flow yet - words are strung<br>together   |
| Grammar                            | for the most part – good<br>control over grammar and<br>sentence structure with<br>only occasional lapses -<br>ESL students may lack<br>sophistication of native<br>speaker | some control - largely over<br>simple patterns - but<br>grammar still breaks down<br>when writer attempts more<br>sophisticated ideas                | the writer is struggling with<br>grammar and standard<br>English structures; meaning<br>is obscured at several<br>points           | very difficult to derive<br>meaning because non-<br>standard grammar or non-<br>native sentence structure<br>gets in the way                                       |
| Convention<br>Mechanics/<br>Format | good control over<br>paragraphing and<br>capitalization and basic<br>punctuation - spelling clear<br>for the most part  | some control, but many<br>conventions are not yet<br>there; writer may still use<br>transitional spelling  | conventions followed only<br>occasionally; spelling may<br>be so idiosyncratic that<br>reader has difficulty<br>making out words   | no control yet over<br>standard writing<br>conventions; letters may<br>not yet be separated into<br>words or sentences may<br>not yet be divided by<br>punctuation |

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